DOCUMENT RESUME

ED 263 422 CE 042 970

TITLE	Math on the Job. Sales Clerk.
INSTITUTION	Ohio State Univ., Columbus. National Center for Research in Vocational Education.
SPONS AGENCY	Office of Special Education and Rehabilitative Services (ED), Washington, DC.
PUB DATE	85
GRANT	G008300003
NOTE	28p.; For the other booklets in this series, see CE 042 963-994.
PUB TYPE	Guides - Classroom Use - Materials (For Learner) (051)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Arithmetic; *Career Awareness; Career Education; *Disabilities; Emotional Disturbances; Enrichment Activities; Learning Disabilities; *Mathematics Skills; Mental Retardation; Occupational Information; Salesmanship; *Sales Occupations; *Sales Workers; Secondary Education; Skill Development; Special Education; *Work Environment

ABSTRACT

This booklet is intended to help mainstreamed mentally retarded, emotionally disturbed, or learning disabled high school students acquire a basic understanding of the responsibilities and working conditions of sales clerks and to practice basic math skills necessary in the occupation. The first section provides a brief introduction to the occupation by focusing upon those job tasks of a sales clerk with which the student is likely to be familiar. The next two sections deal with the work environment of the typical sales clerk and the training, education, and experience needed for the occupation. Exercises addressing basic math skills used by sales clerks are provided. Various suggestions are listed for students interested in further exploring the occupation of sales clerk. A glossary and answer sheet conclude the booklet. (MN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED263422

MATH on the job

Sales Clerk

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Hems

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CE042970

THE NATIONAL CENTER FOR RESEARCH IN VOCATIONAL EDUCATION

THE NATIONAL CENTER MISSION STATEMENT

The National Center for Research in Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning, preparation, and progression. The National Center fulfills its mission by:

- Generating knowledge through research
- Developing educational programs and products
- Evaluating individual program needs and outcomes
- Installing educational programs and products
- Providing information for national planning and policy
- Operating information systems and services
- Conducting leadership development and training programs

MATH ON THE JOB:

SALES CLERK

Copyright © 1985. The National Center for Research in Vocational Education of The Ohio State University. All Rights Reserved.

This publication was prepared pursuant to a grant from the Office of Special Education and Rehabilitation Services, U.S. Department of Education. Grantees undertaking such projects under Government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official U.S. Department of Education position or policy.

MATH on the job

Sales Clerk

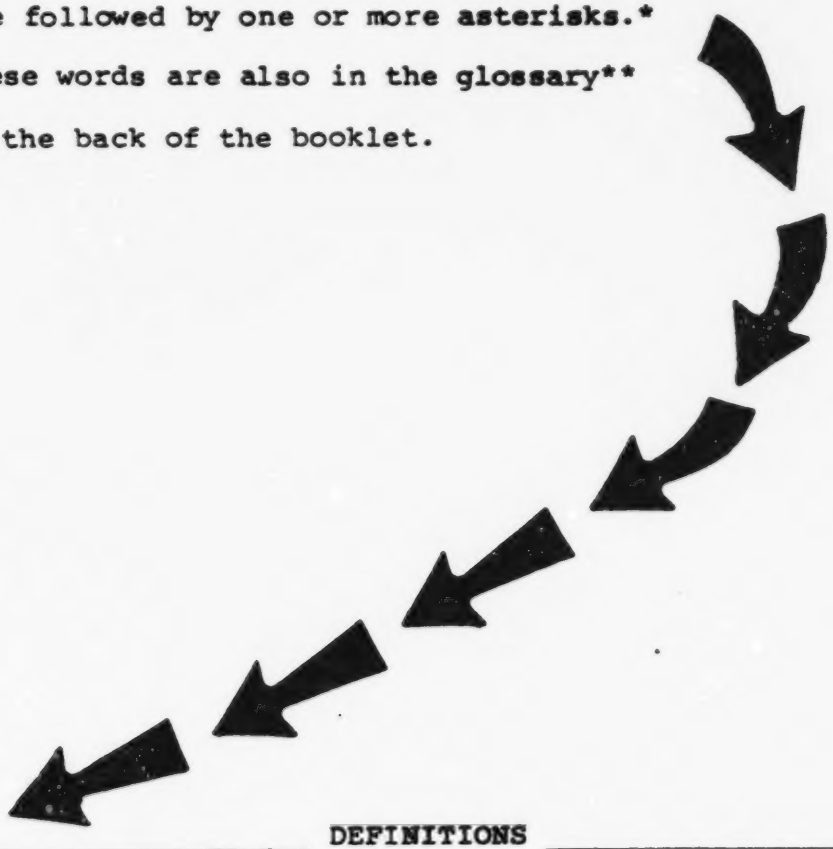
In this booklet, you can--

- find out what a sales clerk does
- see how a sales clerk uses math
- get a chance to use math as a sales clerk
- find out the types of things a sales clerk needs to know
- find out what courses, training, and experience you need to become a sales clerk

SPECIAL WORDS USED IN THIS BOOKLET

Workers in many jobs use special words or special meanings for words. Learning these words helps you to learn about a job.

You will find some of these special words in this booklet. When these words, and some hard words, are used for the first time, they are followed by one or more **asterisks.*** These words are also in the **glossary**** at the back of the booklet.



DEFINITIONS

*An <u>asterisk</u> (*) is a symbol that tells you to look at the bottom of the page for the meaning, or definition, of the word.

**A <u>glossary</u> is a list of words with their meanings.

CONTENTS

HAVE YOU EVER? 1

WHAT DOES A SALES CLERK DO? 2

WHERE DOES A SALES CLERK WORK? 9

WHAT TRAINING, EDUCATION, AND EXPERIENCE DO YOU NEED TO BECOME A SALES CLERK? 12

DO YOU WANT TO DO MORE SALES CLERK'S MATH? 14

DO YOU WANT TO EXPLORE SOME MORE? 18

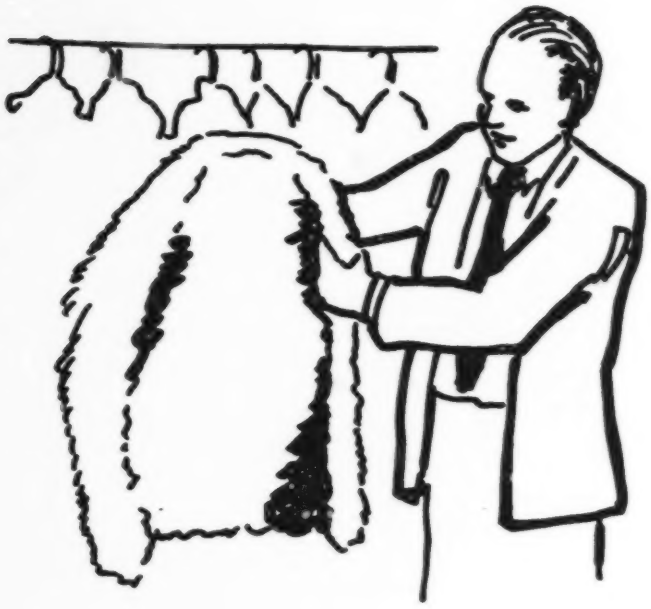
GLOSSARY 19

ANSWER SHEET 20

HAVE YOU EVER...

- listened to a sales person talk about a product for sale?
- sold cookies, candy, or another item for your school?
- tried to convince a family member, friend, or neighbor to buy a certain item?
- watched a sales clerk use the cash register?

If you have, then you have some idea about the work that a sales clerk does. This booklet will help you to learn about the work of a sales clerk and how math is important to do the job.



WHAT DOES A SALES CLERK DO?

A sales clerk's main task is to help customers select **merchandise*** to buy. How does a sales clerk do this? As a sales clerk, you--

- greet customers as they enter the store
- talk to customers about items they are shopping for
- help customers find items
- answer customers' questions about merchandise
- describe attractive things about the merchandise so that the customers will be interested in buying it
- receive payment for merchandise
- wrap or pack items
- give refunds for returned merchandise
- handle exchanges of merchandise
- take **inventory**** of the merchandise on shelves or racks
- mark prices on price tags and attach the tags to the merchandise

DEFINITIONS

*__Merchandise__ is the goods or items that are for sale.

**__Inventory__ is a list of the types and amount of goods or materials on hand in a business.

A sales clerk uses math on the job every day. As a sales clerk, you--

- add, subtract, multiply, and divide
- use whole numbers, percentages, and decimals
- figure quickly and correctly how much is owed for merchandise
- figure out how much sales tax is owed
- write receipts
- count money
- compare the amount owed to the amount paid
- determine the exact difference between two amounts
- make change if it is due
- discount* or mark down** prices
- mark up*** prices

DEFINITIONS

*To <u>discount</u> is to lower the price of an item, sometimes by a percentage of the original price.

**To <u>mark down</u> is to lower prices.

***To <u>mark up</u> is to increase prices.

A sales clerk uses math to give change to customers.

EXAMPLE

As a sales clerk, you will receive customers' payments for merchandise. It is very important that you give the customers the correct amount of change. You should never give customers too much or too little change.

Let's assume you are a sales clerk in a children's clothing store. A customer owes you $31.60 and gives you two twenty-dollar bills. How much change should you give the customer?

Find the amount of change by subtracting the amount owed from the amount given to you:

$$\$40.00 - \$31.60 = \$8.40$$

The amount of change is $8.40.

NOW YOU TRY IT

Practice Exercise A

1. A customer owes you $12.25 and gives you a twenty-dollar bill. How much change should you give the customer?

2. A customer owes you $27.43 and gives you three ten-dollar bills. How much change should you give the customer?

3. A customer owes you $7.25 and gives you a ten-dollar bill and a quarter. How much change should you give the customer?

4. A customer owes you $39.03 and gives you two twenty-dollar bills and a nickel. How much change should you give the customer?

5. How much change should you give a customer who owes you $8.24 and gives you a five-dollar bill, three one-dollar bills, two dimes, and four pennies?

BEST COPY AVAILABLE

A sales clerk uses math to prepare sales receipts.

EXAMPLE

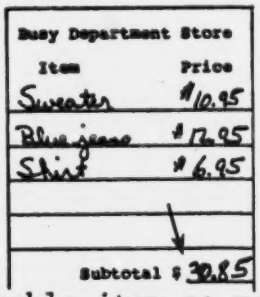
Let's assume that you are a sales clerk in a children's clothing store. You helped a customer select three items of clothing to buy. These items are--

a blue sweater that sells for $10.95

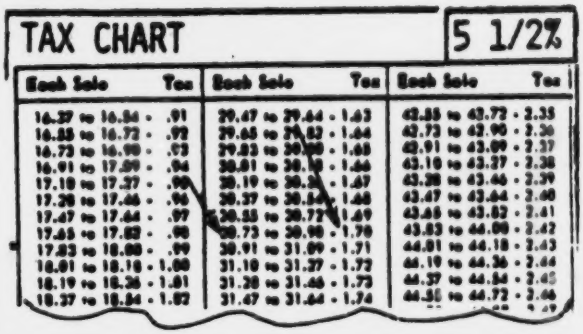
a pair of blue jeans that sell for $12.95

a shirt that sells for $6.95

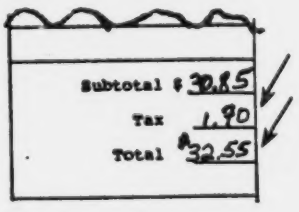
To figure out how much the customer owes, add the amounts.



Clothing is a taxable item so you must add sales tax. Look on the tax chart to find the correct amount of tax.



Add the amount of tax to the merchandise total to determine the grand total.



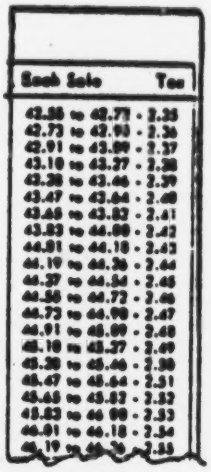
Practice Exercise B

Figure the total amount that each customer owes. Use the tax chart shown below to find the correct sales tax amount.

6.

Busy Department Store

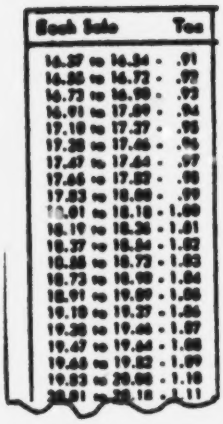
Item	Price
dress	$24.99
blouse	$10.50
purse	$ 8.75
Subtotal	$?
Tax	?
Total	?



7.

Busy Department Store

Item	Price
record album	$ 5.99
double album	$12.99
Subtotal	$?
Tax	?
Total	?



BEST COPY AVAILABLE

A sales clerk uses math to figure mark-down prices.

EXAMPLE

One way to interest customers in buying merchandise is to lower the prices or put the items on sale. Sale prices are often determined as a percent off the regular price. Percent means the number of parts for each 100 parts. Twenty percent is written as 20% and means 20 parts for each 100 parts. Twenty percent (20%) is the same as the fraction 20/100 and the decimal .20.

Let's assume that your manager asks you to mark down the price of a dress by 20%. The regular price is $29.00. To find the reduced price, follow these steps:

Step 1. Change the percent to a decimal by dividing the percentage amount by 100:

$$20\% \div 100 = .20$$

Step 2. Multiply the regular price by the decimal amount. The result is how much you will subtract from the regular price.

$$\$29.00 \times .20 = \$5.80$$

Step 3. Subtract the amount you found in Step 2 from the regular price to get the sale price:

$$\$29.00 - 5.80 = \$23.20$$

The sale price is $23.20.

↓ NOW YOU TRY IT

Practice Exercise C

8. What is the decimal equivalent of 35%?

9. A sweater that usually sells for $48.00 is marked down by 35%. How much will you subtract from the regular price?

10. In the example above, what is the sale price of the sweater?

A sales clerk uses math to figure mark-up prices.

EXAMPLE

Goods to be sold must be marked with the correct selling prices. The store owner buys merchandise and adds the cost of doing business. Costs such as rent, utilities, salaries, and profit are added. This is called the mark up and is usually expressed as a percentage. Some items in stores are marked up as much as 400% over the cost of what the store owner paid for them. To figure the selling price, add the mark-up amount to the cost of the item.

If the store owner paid $20.00 for an item and marks up the price 50%, what is the selling price? First, multiply the mark-up percentage by the purchase price:

$20.00 x 50% = $10.00

Then add the amount to the purchase price to get the selling price:

$20.00 + $10.00 = $30.00

The selling price is $30.00.

NOW YOU TRY IT

Practice Exercise D

11. If a store owner pays $53.00 for a sweater and marks up the price by 40%, what is the selling price?

12. If a store owner pays $24.18 for a camera and marks up the price by 100%, what is the selling price?

13. What is the selling price if a store owner pays $73.00 for a lamp, and marks up the price by 325%?

WHERE DOES A SALES CLERK WORK?

The stores that a sales clerk could work in usually are clean, comfortable, and well-lighted. In some stores, you will work behind a counter. In other stores, you will walk among the merchandise so that you can help the customers. Since a sales clerk must do a great deal of standing and walking, you should be in good health.

In department stores, inexperienced sales clerks usually work in the housewares or clothing departments. The customers in these departments usually do not need much assistance. As you gain more experience, you will move to positions and departments with greater responsibility. The higher priced items in department stores, such as appliances and furniture, are sold by the more experienced (and also higher paid) sales clerks.

As a sales clerk you will work with many people. The types of people you will work with are--

- managers
- other sales clerks
- customers

The manager is your boss. Your manager--

- tells you your regular duties
- gives you special assignments
- helps you work out problems that you can't solve by yourself

You will work with other sales clerks to give your customers good service. To be a good sales clerk you must--

- know what to say to customers
- describe the things for sale in interesting ways
- answer correctly the questions customers may have

A sales clerk may use many machines and special devices such as--

- cash registers that print the amount of the sale on a paper tape
- devices that "read" the name and price of a product from a coded label
- calculators or adding machines
- special computer registers
- price tag guns that attach price tags to the merchandise
- credit card imprinting machines*

The types of machines and devices you use will depend on the size of the store that you work in. It will also depend on the number of tasks that you must do.

DEFINITION

*An imprinting machine is a small hand-operated device. By using pressure, the machine transfers information that is on the credit card to a sales slip.

IF YOU ARE INTERESTED

IN THE WORK OF A SALES CLERK

AND WOULD LIKE TO KNOW MORE,

READ ON

WHAT TRAINING, EDUCATION, AND EXPERIENCE DO YOU NEED TO BECOME A SALES CLERK?

Would you like to work in a large store or a small one? The answers to this question can make a difference in the training, education, and experience you need to become a sales clerk.

While you don't need much training to do the job of a sales clerk, you should be a high school graduate. You must be able to add and subtract quickly. You should be able to communicate clearly and use proper grammar. You also must enjoy working with people.

To be a good sales clerk, you need to know many things about the products that you sell. You need to know the--

- colors and sizes the product comes in
- material the product is made of
- length of time the product will last
- way the product should be cleaned
- way the product should be operated
- price of the product

You also need to know your store's policies* regarding--

- accepting checks
- credit cards
- guarantees
- layaway

DEFINITION

*A policy is the way of doing things.

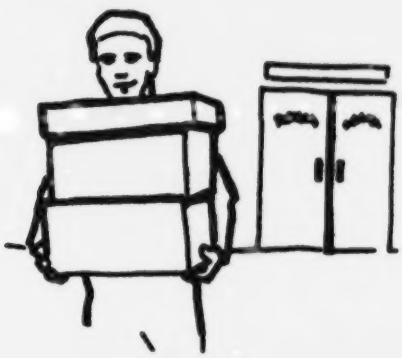
- returns
- exchanges
- refunds
- delivery
- special orders

If you would like to get a job as a sales clerk in a large store, you should apply to the personnel office of the store. You probably will be interviewed and given an aptitude test*. After you are hired, you might have to attend a short training program.

If you want to work in a small store, you should apply to the store manager or owner. After you are hired, you will probably be trained on the job.

As you gain experience, you can move to positions that require greater responsibility. In some stores, the most successful and experienced sales clerks can become managers.

Taking every chance to learn new skills and tasks will help you get a better job and a higher salary. Showing that you have math skills will also help you.



DEFINITION

*An aptitude test is a series of questions that test your abilities, talents, and interests.

DO YOU WANT TO DO MORE SALES CLERK'S MATH?

Practice Exercise E

14. A customer owes $21.52 and gives you one twenty and one five-dollar bill. How much change should you give the customer?

15. A customer owes $72.43 and gives you three twenties and two ten-dollar bills. How much change should you give the customer?

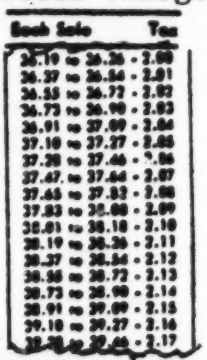
16. How much change should you give a customer who owes $2.57 and gives you a twenty-dollar bill?

17. A customer gives you two twenty-dollar bills and one nickel and owes you $40.04. How much change should you give the customer?

18. A customer owes $18.42 and gives you one ten-dollar bill, one five-dollar bill, three one-dollar bills, and two quarters. How much change should you give the customer?

Practice Exercise F

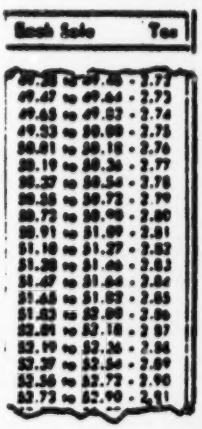
19. Use the sales chart below to find out how much sales tax you would charge on $36.55.



20. On a sheet of paper, draw a copy of the sales slip below. Assume that you sold a customer a shirt that costs $21.50, socks that cost $2.50, and pants that cost $28.00. Record these prices on your sales slip. Total the prices. Find the sales tax by using the tax chart. Figure the total amount that the customer owes.

Busy Department Store

Item	Price
_____	
_____	
_____	
_____	
Subtotal	$ _____
Tax	_____
Total	_____



BEST COPY AVAILABLE

Practice Exercise G

Look at the percents listed under the first column. On a sheet of paper, write the percents as common fractions in the second column and decimals in the third column. The first problem has been done for you.

	Percent	Common Fraction	Decimal
	85%	85/100	.85
21.	100%	?	?
22.	15%	?	?
23.	78%	?	?
24.	5%	?	?
25.	44%	?	?
26.	18%	?	?
27.	25%	?	?
28.	30%	?	?
29.	50%	?	?
30.	10%	?	?
31.	38%	?	?
32.	90%	?	?
33.	60%	?	?

Practice Exercise H

Look at the information in the box. For questions 34-42, calculate the sales prices of the merchandise listed. Write your answers on a sheet of paper.

All dresses	25% off
All shirts	40% off
All pants	30% off
All jewelry	20% off
All shoes	50% off

	Merchandise	Regular Price	Percent Off	Sale Price
	Grey pants	$22.50	30%	$15.75
34.	Blue dress	$17.99	?	?
35.	Earrings	$15.00	?	?
36.	White shirt	$12.50	?	?
37.	Brown shirt	$24.99	?	?
38.	Yellow dress	$26.50	?	?
39.	Necklace	$13.75	?	?
40.	Blue pants	$28.50	?	?
41.	Tennis shoes	$16.99	?	?
42.	Ring	$14.75	?	?

DO YOU WANT TO EXPLORE SOME MORE?

1. Visit your school or community library. Find books on how to sell things. What techniques do different authors suggest you follow to sell something? Make a list of the suggestions that you find. Think about these suggestions.

2. Look in the newspaper for any job ads for sales clerks. What types of stores need sales clerks? How much do these jobs pay? What experience do you need to apply for these jobs? What skills do you need?

3. Arrange to talk with one or more persons employed as sales clerks. Ask them what tasks they perform in their work. Ask them how they use mathematics in their work. Find out how they got their jobs.

4. Are you interested in other jobs in stores?

   - Cashiers operate the cash register in self-service grocery and department stores. They collect money from customers and make change.

   - Stock clerks receive and distribute merchandise in a store. They sort and store the goods according to style, size, and color. They also keep track of inventory counts.

   - Receiving and shipping clerks are responsible for receiving merchandise that comes into the store. They unpack, sort, and verify the goods. They also send the goods to customers' homes or various departments in the store. Sometimes, they return the merchandise to the manufacturer.

   - Display persons set up the merchandise in store windows or on the sales floor. They must make the arrangement of the merchandise look appealing so that the display will attract the customers' attention.

   You can do these jobs without all the math skills listed in this booklet, but you can do a better job if you have math skills. You may get a chance to move to a better job if you can show that you can do your job well, and that you can do the math needed on the job.

GLOSSARY

Aptitude test: a series of questions that test your abilities, talents, and interests.

Asterisk (*): a symbol that tells you to look at the bottom of the page for the meaning or definition of the words.

Discount: to lower the price of an item, sometimes by a percentage of the original price.

Glossary: a list of words with their meaning.

Imprinting machine: a small hand-operated device. By using pressure, the machine transfers information that is on a credit card to a sales slip.

Inventory: a list of the type and amount of goods or materials on hand in a business.

Mark down: to lower prices.

Mark up: to increase prices.

Merchandise: the goods or items that are for sale.

Policy: the way of doing things.

ANSWER SHEET

Practice Exercise A

1. $7.75
2. $2.57
3. $3.00
4. $1.02
5. 0

Practice Exercise B

6. Subtotal $44.24; Tax $2.44; Total $46.68
7. Subtotal $18.98; Tax $1.05; Total $20.03

Practice Exercise C

8. .35
9. $16.80
10. $31.20

Practice Exercise D

11. $74.20
12. $48.36
13. $310.25

Practice Exercise E

14. $3.48
15. $7.57
16. $17.43
17. $0.01
18. $0.08

Practice Exercise F

19. $2.02

20. Busy Department Store

Item	Price
shirt	$21.50
socks	2.50
pants	28.00
Subtotal	$52.00
Tax	2.86
Total	$54.86

Practice Exercise G

21. 100/100; 1.00
22. 15/100; .15
23. 78/100; .78
24. 5/100; .05
25. 44/100; .44
26. 18/100; .18
27. 25/100; .25
28. 30/100; .30
29. 50/100; .50
30. 10/100; .10
31. 38/100; .38
32. 90/100; .90
33. 60/100; .60

Practice Exercise H

34. 25%; $13.49
35. 20%; $12.00
36. 40%; $7.50
37. 40%; $14.99
38. 25%; $19.87
39. 20%; $11.00
40. 30%; $19.95
41. 50%; $8.49
42. 20%; $11.80